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MILBANK, TWEED, HADLEY & MCCLOY
1 CHASE MANHATTAN PLAZA
NEW YORK, NY 10005-1413

EXAMINER
CHENCINSKI, SIEGFRIED E

ART UNIT	PAPER NUMBER
3692	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
09/929,886</td><td>Applicant(s)
ALLEN ET AL.</td><td></td></tr>
<tr><td>Examiner
Siegfried E. Chencinski</td><td>Art Unit
3692</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 November 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>12-24,42-57 and 87-89</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>12-24,42-57 and 87-89</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>11/13/06</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1.   Applicant's election without traverse of invention III (claims 12-24, 42-57 and 87-
89) in the reply filed on November 20, 2006 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 12 & 20-22 are rejected** under 35 U.S.C. 103(a) as being unpatentable
over Cristofich et al. (US 6,173,270 B1, hereafter Cristofich) and Applicant Admitted
Prior Art (hereafter AAPA).

Re. Claims 12, 20-22, Cristofich discloses a method, executable software, computer-
readable medium and a programmed computer for automatically processing a securities
order on a securities exchange directed at a stock option control and exercise system
operated through a stock exchange. Cristofich does not explicitly disclose the narrow
particulars of a method, executable software, computer-readable medium and a
programmed computer for automatically processing a securities order on a securities
exchange, the method comprising:

- automatically receiving a securities order, the securities order including an
  indicator requesting automatic execution; and

- automatically executing at least a portion of the order at a quote price, without
  exposing the order for possible price improvement.

However, AAPA discloses in the specification:

- an auction market on the floor of an exchange (p. 1, ll. 16-17);

- a limit order and a market order (p. 1, ll. 16-17);

- price improvement potential through competition among the crowd on the market floor (p. 1, ll. 18-20);

- an electronic specialist display book (p. 1, l. 22);

- an opportunity to execute an order against other electronic orders on the specialist display book (p. 1, ll. 20-24);

- interest on the part of some investors and institutions in having a transaction execute at a known price (p. 1. ll. 24-25);

- interest on the part of some investors and institutions in having a transaction execute at a known price while foregoing an opportunity for possible price improvement on the auction floor (p. 1. ll. 24-25);

- the desirability on the part of some investors and institutions in having a transaction execute at a known price if the transaction will execute in a more timely fashion than is available with the traditional auction transaction (p. 2, ll. 1-2).

Cristofich discloses a method, executable software, computer-readable medium and a programmed computer for:

- automatically receiving a securities order (Col. 9, l. 19-20), the securities order including an indicator requesting automatic execution (Cristofich discloses the fulfilling of customer requests - Col. 3, l. 47. It would have been obvious to an ordinary practitioner to offer automatic execution and to fulfill such a request when so made.); and

- automatically executing at least a portion of the order at a quote price (Cristofich, Col. 9, ll. 15-20) without exposing the order for possible price improvement. (It is implicit in Cristofich to fulfill automatically fulfill customer orders at a quote price when a customer's conditions are met, such as when the customer's buy price is met by a quote price. – Col. 9, ll. 15-20. It is implicit that no attempt is made to expose the order for possible price improvement).

Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide

a method for automatically processing a securities order on a securities exchange, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, ll. 29-33).

Re. Claims 13-15, Cristofich discloses wherein the securities order is a limit order (Col. 11, ll. 4-5) or a market order (Col. 10, ll. 23-25), and an execution report (Col. 10, ll. 15-17).

Re. Claim 17, Cristofich does not explicitly disclose at least partially fulfilling the order from a display book order. However, AAPA discloses at least partially fulfilling the order from a display book order. Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from a display book order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, ll. 29-33).

Re. Claim 18, please see the rejection of claim 16 regarding automatically executing an order without going to counter parties and/or the market crowd. AAPA discloses fulfilling an order through an auction market crowd by fulfilling the order from one's own inventory. It would have been obvious at the time of Applicant's invention to fulfill an order partially through a counter party such as potentially identified from an auction market crowd. Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from an auction market crowd after automatically executing the order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, ll. 29-33).

Re. Claim 19, neither Cristofich nor AAPA explicitly disclose at least partially fulfilling the order from a display book order after automatically executing the order. However, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to at least partially fulfill the order from a display book order (see the rejection of claim 17) after automatically executing the order (see the rejection of claim 16 and 18). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from a display book order after automatically executing the order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claim 23, Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for automatically processing a limit buy or sell order for a security on a securities exchange with an auction market crowd, the method comprising:

- automatically receiving the limit order for the security;
- automatically determining that the limit order includes an indicator requesting automatic execution;
- automatically determining that the limit order qualifies for automatic execution; and
- automatically executing at least a portion of the limit order against a respective offer or bid for the security, without exposing the limit order to the auction market crowd for possible price improvement.

However, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange as discussed in the rejection of claim 12 above. Further AAPA discloses limit orders (with

sell and buy order implicit). Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including limit buy or sell orders, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, ll. 29-33).

Re. Claim 24, Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for automatically processing a market buy or sell order for a security on a securities exchange with an auction market crowd, the method comprising:

- automatically receiving the market order for the security;
- automatically determining that the market order includes an indicator requesting automatic execution;
- automatically determining that the market order qualifies for automatic execution; and
- automatically executing at least a portion of the market order against a respective offer or bid for the security, without exposing the market order to the auction market crowd for possible price improvement.

However, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange as discussed in the rejection of claim 12 above. Further AAPA discloses market orders (with sell and buy order implicit). Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including market buy or sell orders, motivated by a desire to provide a data processing method and

system for managing individual accounts directed to the transacting of securities

transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claims 42 & 51-53, Cristofich does not explicitly disclose the narrow particulars of a

method, executable software, computer-readable medium and a programmed computer

for processing a securities order on a securities exchange, the method comprising:

- receiving the securities order, the securities order including an indicator requesting
  automatic execution and a price of the order;

- comparing the price of the order to a quote; and

- changing the status of the order from automatic execution to regular execution if
  the price of the order is not equal to or better than the quote.

However, an ordinary practitioner of the art at the time of Applicant's invention would

have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide

a method for automatically processing a securities order on a securities exchange as

discussed in the rejection of claim 12 above, and to see an implicit comparing step

involved in validating an order for automatic execution. Further, AAPA discloses limit

orders and market orders (with sell and buy orders implicit). It would have been obvious

to change the status of an order from automatic execution to regular execution if the

price of the order is not equal to or better than the quote since normally a brokerage firm

is in business to make a profit. Disregarding the subject of commissions charged for

trades, a buy order in this instance set for automatic execution which is not equal to or

better than a quote would produce a loss for the brokerage firm, thus forcing the order

to be changed from automatic to regular execution. Regular execution in the trading of

securities means seeking counter parties who are willing to accept this buy order at the

offered buy price. Such a fixed buy price is otherwise called a limit buy order, since it is

not a market buy order which will pay any price offered by a seller during the customer

authorized time period of the market buy order. Therefore, it would have been obvious

to an ordinary practitioner of the art at the time of Applicant's invention to have seen it

as obvious to have used the disclosures of Cristofich and AAPA to provide a method for

automatically processing a securities order on a securities exchange, including changing

the status of the order from automatic execution to regular execution if the price of the order is not equal to or better than the quote, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, ll. 29-33).

Re. Claim 46, Cristofich discloses sending an execution report for the order (Col. 10, ll. 15-17).

Re. Claims 44, 45, 47 and 48, Cristofich does not explicitly disclose:

Re. Claim 44, further comprising exposing the order to an auction market crowd for possible price improvement.

Re. Claim 45, comprising executing the order on an auction market of the securities exchange.

Re. Claim 47, at least partially fulfilling the order from a display book order.

Re. Claim 48, comprising at least partially fulfilling the order with an order from an auction market crowd.

However:

Re. Claim 44, AAPA discloses exposing the order to an auction market crowd for possible price improvement (page 1, ll. 16-24).

Re. Claim 45, AAPA discloses executing the order on an auction market of the securities exchange (page 1, ll. 16-24).

Re. Claim 47, at least partially fulfilling the order from a display book order (please see the rejection of claim 17).

Re. Claim 48, AAPA discloses at least partially fulfilling the order with an order from an auction market crowd (page 1, ll. 16-24).

Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including exposing the order to an auction market crowd for possible price improvement, executing the order on an auction market of the securities exchange, at least partially fulfilling the order from a display book order and at least

partially fulfilling the order with an order from an auction market crowd, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claim 54, neither Cristofich nor AAPA explicitly disclose the exact detailed sequence of a method for processing a securities order on a securities exchange, the method comprising:

- receiving the securities order, the securities order including an indicator requesting automatic execution and a size of the order;
- comparing the size of the order to a respective interest in the security; and
- changing the status of at least a portion of the order from automatic execution to regular execution if the size of the order is greater than the interest.

However, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange as discussed in the rejection of claims 12 and 42 above, and to see an implicit comparing step involved in validating an order for automatic execution. Further, AAPA discloses limit orders and market orders (with sell and buy orders implicit). It would have been obvious to change the status of an order from automatic execution to regular execution if the respective interest in the security does not meet the size of the security being offered, since no exact matching counter party offer is available for automatic execution. Some examples of this condition will exist if the respective interest is for a smaller quantity or an interest has made itself known for a larger quantity which is unwilling to buy a partial quantity. The ordinary practitioner would have seen it as obvious that the order had to be changed from automatic to regular execution. Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for converting automatic processing of a securities order to regular processing on a securities exchange, motivated by a desire to provide a data processing method

and system for managing individual accounts directed to the transacting of securities
transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claim 55, please see the rejections of claims 12 and 42 above.

Re. Claims 56 & 57, please see the rejections of claims 13 and 14 above.

3. **Claim 16 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Cristofich
and AAPA as applied to claim 12 above, and further in view of Madoff et al. (Pg. Pub.
2001/0044767 A1, hereafter Madoff).

Re. Claim 16, neither Cristofich nor AAPA explicitly disclose identifying at least one
particular contra side for the order after automatically executing the order. However,
Madoff discloses immediate matching with a contra side order (p. 1, [0011]-II. 8-10).
Further, Madoff discloses an electronic negotiated market involving dealers that
negotiate a trade for a security for their own account or for that of a client (p. 1, [0004]-II.
11-14). This would have made it obvious to an ordinary practitioner of the art at the time
of Applicant's invention to executing an order to buy or sell a security under certain
conditions on their own account and then identifying contra sides for buying or selling
the security through contra parties to restore their own account to their preferred
position(s). Therefore, an ordinary practitioner of the art at the time of Applicant's
invention would have seen it as obvious to have used the disclosures of Cristofich,
AAPA and Madoff to provide a method for automatically processing a securities order on
a securities exchange, including the step of identifying at least one particular <u>contra side</u>
for the order <u>after</u> automatically executing the order, motivated by a desire to provide an
automated auction system for trading products such as equity securities (Madoff, p. 1,
[0001]).

3. **Claims 43 & 49 are rejected** under 35 U.S.C. 103(a) as being unpatentable over
Cristofich and AAPA as applied to claim 42 above, and further in view of Madoff.

Re. Claims 43 & 49, neither Cristofich nor AAPA explicitly disclose wherein:

Re. Claim 43, the securities order further includes a size, changing the status of at least a portion of the order from automatic execution to regular execution if the size is greater than the interest.

Re. Claim 49, the quote includes a best bid price for the security, the securities order is a sell order and the price of the order is greater than the best bid price. However, Madoff discloses that auctioning of financial products "involves entering order for products with price, quantity and exposure time is matched with response in accordance with the order's exposure time" (Abstract, ll. 4-7).

Re. claim 43, it would have been obvious to an ordinary practitioner that an order received for automatic execution must receive an offer for the same or lower price, the same or lower quantity, and must be received within the time specified unless it is an open order until it is filled.

Re. claim 49, the ordinary practitioner would have seen it as obvious that a sell order priced above the best bid price could not be processed for automatic execution because it would have to go to the market similar to the buy order in claim 43 above which is priced under the market.

Therefore, re. Claims 43 & 49, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Madoff to provide a method for automatically processing a securities order on a securities exchange, including the step of changing the status of at least a portion of the order from automatic execution to regular execution if the size is greater than the interest, or a sell order has a price which is greater than the best bid price, motivated by a desire to provide an automated auction system for trading products such as equity securities (Madoff, p. 1, [0001]).

4.   **Claim 50 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Cristofich and AAPA as applied to claim 42 above, and further in view of Wilton et al. (US patent 6,519,574 B1, hereafter Wilton).

Re. Claim 50, neither Cristofich nor AAPA explicitly disclose the exact wording of a quote includes a best offer price for the security, the securities order is a buy order and

the price of the order is less than the best offer price. However, Wilton discloses a quote includes a best offer price for the security, the securities order is a buy order and the price of the order is less than the best offer price (Col. 10, II. 7-17). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Wilton to provide a quote includes a best offer price for the security, the securities order is a buy order and the price of the order is less than the best offer price, including the step of identifying at least one particular contra side for the order after automatically executing the order, motivated by a desire to provide trading data which includes bid and/or offer information input by the trading entity and displaying such data to the trading entity for the purpose of detecting trading opportunities According to various trading parameters established by the trader (Wilton, Abstract – II. 1-14).

5. Claims 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cristofich in view of AAPA and Hasbrouck, Sofianos and Sosebee (New York Stock Exchange Systems and Trading Procedures, NYSE Working Paper #93-01, Draft 1.2 April 27, 1993, hereafter Hasbrouck).

Re. Claim 87, Cristofich and AAPA disclose a method for automatically processing a securities order on a securities exchange, the method comprising: receiving a securities order identified for automatic execution; automatically executing the transaction; and automatically updating the published quote based on the order against a quote (see the rejection of claim 12). Cristofich does not explicitly disclose the expressions "an auction market crowd", and "a published quote". However, AAPA discloses processing orders with "an auction market crowd" (page 1, II. 16-24). Further, Hasbrouck discloses published quotes (page 13, I. 13). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have combined the disclosures of Cristofich, AAPA and Hasbrouck in order to provide a method for automatically processing a securities order on a securities exchange with an auction market crowd, motivated by a desire to provide a data processing method and system

for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claims 88 & 89, it is implicit in exchange procedures that a size of the published quote after updating reflects a size of the order or wherein a size of the published·quote after updating represents a minimum quote size, but does not necessarily reflect a size of the transaction.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Richard E. Chilcot, can be reached on (571) 272-6777.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

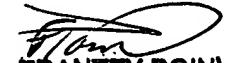*Commissioner of Patents and Trademarks, Washington D.C. 20231*

or *(571)273-8300*   [Official communications; including After Final communications labeled "Box AF"]

or *(571) 273-6792*[Informal/Draft communications, labeled "PROPOSED DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

February 5, 2007

FRANTZY POINVIL
PRIMARY EXAMINER